CLAIMS

1. A display including a display medium for controlling a state of light passing through the display medium,

the display being characterized in that, provided that one direction away from the display medium is termed "first direction" and the other direction away from the display medium is termed "second direction", the display medium and selective reflecting means for reflecting light in a first state and allowing light in a second state to pass through are disposed in this order in the second direction, and

the selective reflective means is disposed only in the second direction of the display medium.

2. The display as defined in claim 1, wherein,

the first state and the second state are polarization states,

the selective reflecting means is polarizing selective reflecting means which reflects the light in the first polarization state and allows the light in the second polarization state to pass through, and

in the second direction,

first polarizing means for allowing only a light component in a predetermined polarization state to pass through,

the display medium,

the polarizing selective reflecting means, and

second polarizing means for absorbing a light component in the first polarization state while allowing a light component in the second polarization state to pass through, are disposed in this order.

3. The display as defined in claim 2, wherein, the predetermined polarization state is a state of linear polarization,

the first polarization state is a state of linear polarization in a (1) direction, and the second polarization state is a state of linear polarization in a (2) direction orthogonal to the (1) direction, and

the display medium is a 90° twisted liquid crystal layer.

4. The display as defined in either claim 2 or 3, wherein, the second polarization state is a state of linear polarization, and

in the second direction of the second polarizing means, a $\lambda/4$ plate is disposed.

5. The display as defined in claim 1, wherein,

the first state and the second state are circular polarization states,

the selective reflecting means is polarizing selective reflecting means which reflects light in the first circular polarization state, and allowing light in the second circular polarization state, whose rotative direction is opposite to a rotative direction of the light in the first circular polarization state, to pass through, and

in the second direction,

polarizing means, which has a first transmission axis, for allowing a linearly polarized light component in a predetermined direction to pass through,

a first $\lambda/4$ plate,

the display medium,

the polarizing selective reflecting means,

a second $\lambda/4$ plate, and

polarizing means having a second transmission axis which is orthogonal to the first transmission axis, are provided in this order.

6. The display as defined in any one of claims 1-5, further comprising a light absorber which absorbs light passing away in the second direction and is able to be inserted into and removed from a light path.

7. The display as defined in any one of claims 1-6, further comprising a first color filter disposed in the first

direction of the display medium and a second filter disposed in the second direction of the selective reflecting means.

8. The display as defined in any one of claims 1-6, further comprising a color filter in the first direction of the display medium, wherein, the color filter has a plurality of transmittance areas in each pixel of the display medium.

9. The display as defined in claim 8, wherein, the transmittance areas are divided into (i) a high-transmittance area which has a high transmittance and provided, in the first direction, on a non-transmitting area which does not allow light moving in the second direction to pass through, when transmission image reproduction is performed on a side in the second direction, and (ii) a low-transmittance area which has a transmittance lower than the transmittance of the high-transmittance area and is disposed on a transmitting area which allows the light to pass through.

10. The display as defined in any one of claims 1-4, further comprising a light absorbing layer in the second direction of a driver wiring for driving the display medium.

11. The display as defined in any one of claims 1-4, wherein, a driver wiring for driving the display medium is

made of a low-reflecting material which restrains reflection of light to be not more than a predetermined value.

12. The display as defined in any one of claims 1-4, wherein, tones of an image reproduced from display data are reversed when reflective image reproduction on a side in the first direction is changed to a transmission image reproduction on a side in the second direction, and when the transmission image reproduction on the side in the second direction is changed to the reflective image reproduction on the side in the first direction.

13. The display as defined in any one of claims 1-4, wherein, an image reproduced from display data is laterally reversed when reflective image reproduction on a side in the first direction is changed to a transmission image reproduction on a side in the second direction, and when the transmission image reproduction on the side in the second direction is changed to the reflective image reproduction on the side in the first direction.

14. The display as defined in any one of claims 1-4, wherein, an image reproduced from display data is turned upside down when reflective image reproduction on a side in the first direction is changed to a transmission image

reproduction on a side in the second direction, and when the transmission image reproduction on the side in the second direction is changed to the reflective image reproduction on the side in the first direction.

15. The display as defined in claim 1, wherein, a non-transmitting area which does not allow light to pass through is provided in the second direction of the display medium, and

between at least a part of the non-transmitting area and the display medium, light reflecting means for causing light passing through the display medium in the second direction to be reflected is provided.

16. The display as defined in claim 15, wherein,

the first state and the second state are polarization states,

the selective reflecting means is polarizing selective reflecting means for reflecting the light in the first polarization state while allowing the light in the second polarization state to pass through,

in the second direction,

first polarizing means for allowing only a light component in a predetermined polarization state to pass through,

the display medium,

the polarizing selective reflecting means, and

second polarizing means for absorbing a light component in the first polarization state and allowing a light component in the second polarization state to pass through, are provided,

a pair of transparent substrate sandwiching the display medium are provided,

the polarizing selective reflective means is provided in the second direction of one of the pair of transparent substrate, said one of the pair of transparent substrates being provided in the second direction with respect to the other one of the pair of transparent substrates, and

between the display medium and the transparent substrate in the second direction with respect to the other transparent substrate, the non-transmitting area is provided.

17. The display as defined in claim 16, wherein,

the display medium controls a polarization state of light passing through the display medium so that:

in a case of light-state image reproduction viewed from a side in the first direction, light being incident from a side in the first direction of the first polarizing means and reflected on the reflecting means and light being incident from the side in the first direction of the first polarizing means and

reflected on the polarizing selective reflecting means pass through the first polarizing means again; and

in a case of dark-state image reproduction viewed from the side in the first direction, the light being incident from a side in the first direction of the first polarizing means and reflected on the reflecting means and the light being incident from the side in the first direction of the first polarizing means and heading for the polarizing selective reflecting means are caused not to pass through the first polarizing means again.

18. The display as defined in claim 17, wherein,

the first polarization state is a state of linear polarization in a (1) direction, and the second polarization state is a state of linear polarization in a (2) direction orthogonal to the (1) direction,

the predetermined polarization state is the first polarization state, and

the display medium controls a polarization state of light passing through the display medium, so that,

with respect to light came from a side in the first direction of the first polarizing means and has passed through the first polarizing means,

the polarization state of the light is substantially unchanged in the case of light-state image reproduction, and

in the case of dark-state image reproduction, provided that a phase difference between orthogonal axes of polarized light on a plane in parallel to the transparent substrate is 0 in a case of the first polarization state, a phase difference of light having just passed through the display medium and heading for the reflecting means is substantially π/2, a phase difference of light having just passed through the display medium and heading for the first polarizing means is substantially π, and a phase difference of light having just passed through the display medium and heading for the polarizing selective reflecting means is substantially π.

19. The display as defined in claim 18, wherein, a thickness of a part of the display medium between the first polarizing means and the reflecting means is substantially half as much as a thickness of a part of the display medium between the first polarizing means and the polarizing selective reflecting means not facing the reflecting means, in the first/second direction.

20. The display as defined in any one of claims 17-19, wherein:

in a case of normally image reproduction, the polarizing selective reflecting means allow most of light coming from a side in the first direction to pass through, the first polarizing

means absorbs most of light being reflected on the reflecting means and reaching the first polarizing means, and the second polarizing means allows most of light coming from a side in the first direction to pass through;

in a case of maximum-drive image reproduction, the polarizing selective reflecting means reflects most of light coming from the side in the first direction, and the first polarizing means allows most of light reflected on the reflecting means to pass through.

21. The display as defined in claim 1, wherein,

an area for display on the display medium is divided into (i) a first area in which a transmission operation to allow light incident on the display area from a side in the first direction to pass through in the second direction and a reflection operation to reflect light incident on the display area from the side in the first direction to the first direction are carried out and (ii) a second area in which the reflection operation to reflect light incident on the display area from the side in the first direction to the first direction is carried out,

reflecting means for reflecting light passing through the display medium in the second direction is provided in the second direction of the display medium,

the reflection operation is carried out in the second area using the reflecting means, and

the display is able to carry out:

transmission image reproduction arranged in such a manner that, by means of the transmission operation in the first area, light incident on the first area from the side in the first direction is controlled to be in the second state and thus allowed to pass through the selective reflecting means, so as to be utilized for image reproduction on a side in the second direction of the display medium;

first reflective image reproduction arranged in such a manner that, by means of the reflection operation in the first area, light incident on the first area from the side in the first direction is controlled to be in the first state and hence reflected on the selective reflecting means, so as to be utilized for image reproduction on the side in the first direction of the display medium; and

second reflective image reproduction arranged in such a manner that, by means of the reflection operation in the second area, light incident on the second area from the side in the first direction is utilized for image reproduction on the side in the first direction of the display medium.

22. The display as defined in claim 21, wherein,

in a case of the first reflective image reproduction, light-state image reproduction is carried out such that light incident on the first area from the side in the first direction is

controlled to be in the first state so as to be reflected on the selective reflecting means, while dark-state image reproduction is carried out such that light incident on the first area from the side in the first direction is controlled to be in the second state so as to pass through the selective reflecting means,

in a case of the second reflective image reproduction, light-state image reproduction is carried out such that light reflected on the reflecting means is allowed to reach eyes of a viewer on the side in the first direction of the display medium, while dark-state image reproduction is carried out such that light reflected on the reflecting means is caused not to reach the eyes of the viewer on the side in the first direction of the display medium,

and thus the first reflective image reproduction corresponds to the second reflective image reproduction, since the first reflective image reproduction and the second reflective image reproduction are both light-state image reproduction or both dark-state image reproduction.

23. The display as defined in claim 22, wherein, in the transmission image reproduction, dark-state image reproduction is carried out such that light incident on the first area from the side in the first direction is controlled to be in the first state so as to be reflected on the selective

reflecting means, while light-state image reproduction is carried out such that light incident on the first area from the side in the first direction is controlled to be in the second state so as to pass through the selective reflecting means.

24. The display as defined in claim 21, wherein,

the first state and the second state are polarization states,

the selective reflecting means reflects light in a first polarization state, while allows light in a second polarization state to pass through, and

first polarizing means which only allows a light component in a predetermined polarization state to pass through is provided in the first direction of the display medium.

25. The display as defined in claim 24, wherein,

the predetermined polarization state is a state of linear polarization,

the first polarization state is a state of linear polarization in a (1) direction, while the second polarization state is a state of linear polarization in a (2) direction orthogonal to the (1) direction,

a transmission axis of the first polarizing means is orthogonal to a transmission axis of the polarizing selective

reflecting means, and

when a lowest voltage among drive voltages is applied to the display medium, light incident on the first area from the side in the first direction becomes, on the polarizing selective reflecting means, either elliptically polarized light or linearly polarized light having a major axis in parallel to the transmission axis of the polarizing selective reflecting means, and light incident on the second area from the side in the second direction becomes, on the reflecting means, either elliptically polarized light or circularly polarized light.

26. The display as defined in claim 24, wherein,

the predetermined polarization state is a state of linear polarization,

the first polarization state is a state of linear polarization in a (1) direction, while the second polarization state is a state of linear polarization in a (2) direction orthogonal to the (1) direction,

a transmission axis of the first polarizing means is orthogonal to a transmission axis of the polarizing selective reflecting means,

when a highest voltage among drive voltages is applied to the display medium,

light incident on the first area from the side in the first direction becomes, on the polarizing selective reflecting

means, either elliptically polarized light or linearly polarized light having a major axis in parallel to the transmission axis of the polarizing selective reflecting means, and

light incident on the second area from the side in the first direction becomes, on the reflecting means, either elliptically polarized light or circularly polarized light.

27. The display as defined in either claim 25 or 26, wherein,

the elliptically polarized light or the linearly polarized light on the polarizing selective reflecting means is elliptically polarized light in which ellipticity is not more than 0.3, and

the elliptically polarized light or the linearly polarized light on the reflecting means is elliptically polarized light in which ellipticity is not less than 0.7.

28. The display as defined in claim 27, wherein, the elliptically polarized light or the linearly polarized light on the polarizing selective reflecting means is elliptically polarized light in which ellipticity is not more than 0.22.

29. The display as defined in claim 27, wherein, the elliptically polarized light or the linearly polarized light on the reflecting means is elliptically polarized light in which ellipticity is not less than 0.78.

30. The display as defined in either claim 25 or 26, wherein, optical compensation means having retardation is provided at least in the first direction of the display medium.

31. The display as defined in claim 30, wherein, optical compensation means having retardation is provided in the second direction of the display medium.

32. The display as defined in claim 30, wherein, the optical compensation means is made up of a plurality of optical compensation elements.

33. The display as defined in claim 27, wherein, the display medium in the second area is a 90° twisted nematic liquid crystal layer whose retardation is in a range of not less than 150nm and not more than 340nm.

34. The display as defined in claim 27, wherein, the display medium in the first area is a 90° twisted nematic liquid crystal layer whose retardation is not less than 400nm.

35. The display as defined in claim 25, wherein,

first optical compensation means having retardation is disposed between the first polarizing means and the display

medium,

second optical compensation means having retardation is disposed between the display medium and the polarizing selective reflecting means,

in the second direction of the polarizing selective reflecting means, second polarizing means, which absorbs a light component in the first polarization state while allows a light component in the second polarization state to pass through, is provided,

the display medium is a substantially homogeneously-aligned liquid crystal layer, a transmission axis of the first polarizing means is substantially orthogonal to a transmission axis of the second polarizing means, a director of liquid crystal molecules is substantially orthogonal to a lagging axis of the first optical compensation means, when the lowest voltage is applied, in the second area, a value of retardation Rr of the liquid crystal layer and a value of retardation R1 of the first optical compensation means satisfy $-175nm \leq (Rr-R1) \leq -105nm$, the director of the liquid crystal molecules is substantially in parallel to a lagging axis of the second optical compensation means, and when the lowest voltage is applied, in the first area, a value of retardation Rt of the liquid crystal layer, the value of retardation R1 of the first optical compensation means, and a value of retardation R2 of the second optical compensation means satisfy

$190nm \leq (Rt-R1+R2) \leq 300nm$.

36. The display as defined in claim 26, wherein,

first optical compensation means having retardation is disposed between the first polarizing means and the display medium,

second optical compensation means having retardation is disposed between the display medium and the polarizing selective reflecting means,

in the second direction of the polarizing selective reflecting means, second polarizing means, which absorbs a light component in the first polarization state while allows a light component in the second polarization state to pass through, is provided,

the display medium is a substantially homogeneously-aligned liquid crystal layer, a transmission axis of the first polarizing means is substantially orthogonal to a transmission axis of the second polarizing means, a director of liquid crystal molecules is substantially orthogonal to a lagging axis of the first optical compensation means, when the highest voltage is applied, in the second area, a value of retardation Rr of the liquid crystal layer and a value of retardation R1 of the first optical compensation means satisfy $-175nm \leq (Rr-R1) \leq -105nm$, the director of the liquid crystal molecules is substantially in parallel to a lagging axis

of the second optical compensation means, and when the highest voltage is applied, in the first area, a value of retardation Rt of the liquid crystal layer, the value of retardation R1 of the first optical compensation means, and a value of retardation R2 of the second optical compensation means satisfy $190nm \leq (Rt-R1+R2) \leq 300nm$.

37. The display as defined in claim 25, wherein,

first optical compensation means having retardation is disposed between the first polarizing means and the display medium,

second optical compensation means having retardation is disposed between the display medium and the polarizing selective reflecting means,

in the second direction of the polarizing selective reflecting means, second polarizing means, which absorbs a light component in the first polarization state while allows a light component in the second polarization state to pass through, is provided,

the display medium is a substantially homogeneously-aligned liquid crystal layer, a transmission axis of the first polarizing means is substantially in parallel to a transmission axis of the second polarizing means, a director of liquid crystal molecules is substantially orthogonal to a lagging axis of the first optical compensation means,

when the lowest voltage is applied, in the second area, a value of retardation Rr of the liquid crystal layer and a value of retardation R1 of the first optical compensation means satisfy $-175nm \leq (Rr-R1) \leq -105nm$, and when the lowest voltage is applied, in the first area, a value of retardation Rt of the liquid crystal layer, the value of retardation R1 of the first optical compensation means, and a value of retardation R2 of the second optical compensation element satisfy either (i) $25nm \leq (Rt-R1+R2) \leq 50nm$ on a occasion that the director of the liquid crystal molecules is substantially in parallel to a lagging axis of the second optical compensation means, or (ii) $-50nm \leq (Rt-R1-R2) \leq 25nm$ on a occasion that the director of the liquid crystal molecules is substantially orthogonal to the lagging axis of the second optical compensation element.

38. The display as defined in claim 26, wherein,

first optical compensation means having retardation is disposed between the first polarizing means and the display medium,

second optical compensation means having retardation is disposed between the display medium and the polarizing selective reflecting means,

in the second direction of the polarizing selective reflecting means, second polarizing means, which absorbs a light component in the first polarization state while allows a

light component in the second polarization state to pass through, is provided,

the display medium is a substantially homogeneously-aligned liquid crystal layer, a transmission axis of the first polarizing means is substantially in parallel to a transmission axis of the second polarizing means, a director of liquid crystal molecules is substantially orthogonal to a lagging axis of the first optical compensation means, when the highest voltage is applied, in the second area, a value of retardation Rr of the liquid crystal layer and a value of retardation R1 of the first optical compensation means satisfy $-175\text{nm} \leq (Rr-R1) \leq -105\text{nm}$, the director of the liquid crystal molecules is substantially in parallel to a lagging axis of the second optical compensation means, and when the highest voltage is applied, in the first area, a value of retardation Rt of the liquid crystal layer, the value of retardation R1 of the first optical compensation means, and a value of retardation R2 of the second optical compensation element satisfy either (i) $25\text{nm} \leq (Rt-R1+R2) \leq 50\text{nm}$ on a occasion that the director of the liquid crystal molecules is substantially in parallel to a lagging axis of the second optical compensation means, or (ii) $-50\text{nm} \leq (Rt-R1-R2) \leq 25\text{nm}$ on a occasion that the director of the liquid crystal molecules is substantially orthogonal to the lagging axis of the second optical compensation element.

39. The display as defined in claim 25, wherein,

first optical compensation means having retardation is disposed between the first polarizing means and the display medium,

second optical compensation means having retardation is disposed between the display medium and the polarizing selective reflecting means,

in the second direction of the polarizing selective reflecting means, second polarizing means, which absorbs a light component in the first polarization state while allows a light component in the second polarization state to pass through, is provided,

the display medium is a substantially homogeneously-aligned liquid crystal layer, a transmission axis of the first polarizing means is substantially orthogonal to a transmission axis of the second polarizing means, a director of liquid crystal molecules is substantially orthogonal to a lagging axis of the first optical compensation means, when the lowest voltage is applied, in the second area, a value of retardation Rr of the liquid crystal layer and a value of retardation R1 of the first optical compensation means satisfy $100nm \leq (Rr-R1) \leq 170nm$, the director of the liquid crystal molecules is substantially orthogonal to a lagging axis of the second optical compensation means, and when the lowest

voltage is applied, in the first area, a value of retardation Rt of the liquid crystal layer, the value of retardation R1 of the first optical compensation means, and a value of retardation R2 of the second optical compensation means satisfy $190nm \le (Rt-R1-R2) \le 300nm$.

40. The display as defined in claim 26, wherein,

first optical compensation means having retardation is disposed between the first polarizing means and the display medium,

second optical compensation means having retardation is disposed between the display medium and the polarizing selective reflecting means,

in the second direction of the polarizing selective reflecting means, second polarizing means, which absorbs a light component in the first polarization state while allows a light component in the second polarization state to pass through, is provided,

the display medium is a substantially homogeneously-aligned liquid crystal layer, a transmission axis of the first polarizing means is substantially orthogonal to a transmission axis of the second polarizing means, a director of liquid crystal molecules is substantially orthogonal to a lagging axis of the first optical compensation means, when the highest voltage is applied, in the second area, a

value of retardation Rr of the liquid crystal layer and a value of retardation R1 of the first optical compensation means satisfy $100nm \le (Rr-R1) \le 170nm$, the director of the liquid crystal molecules is substantially orthogonal to a lagging axis of the second optical compensation means, and when the highest voltage is applied, in the first area, a value of retardation Rt of the liquid crystal layer, the value of retardation R1 of the first optical compensation means, and a value of retardation R2 of the second optical compensation means satisfy $190nm \le (Rt-R1-R2) \le 300nm$.

41. The display as defined in claim 25, wherein,

first optical compensation means having retardation is disposed between the first polarizing means and the display medium,

second optical compensation means having retardation is disposed between the display medium and the polarizing selective reflecting means,

in the second direction of the polarizing selective reflecting means, second polarizing means, which absorbs a light component in the first polarization state while allows a light component in the second polarization state to pass through, is provided,

the display medium is a substantially homogeneously-aligned liquid crystal layer, a transmission

axis of the first polarizing means is substantially in parallel to a transmission axis of the second polarizing means, a director of liquid crystal molecules is substantially orthogonal to a lagging axis of the first optical compensation means, when the lowest voltage is applied, in the second area, a value of retardation Rr of the liquid crystal layer and a value of retardation R1 of the first optical compensation means satisfy $100nm \leq (Rr-R1) \leq 170nm$, the director of the liquid crystal molecules is substantially orthogonal to a lagging axis of the second optical compensation means, and when the lowest voltage is applied, in the first area, a value of retardation Rt of the liquid crystal layer, the value of retardation R1 of the first optical compensation means, and a value of retardation R2 of the second optical compensation means satisfy $-50nm \leq (Rt-R1-R2) \leq 50nm$.

42. The display as defined in claim 26, wherein,

first optical compensation means having retardation is disposed between the first polarizing means and the display medium,

second optical compensation means having retardation is disposed between the display medium and the polarizing selective reflecting means,

in the second direction of the polarizing selective reflecting means, second polarizing means, which absorbs a

light component in the first polarization state while allows a light component in the second polarization state to pass through, is provided,

the display medium is a substantially homogeneously-aligned liquid crystal layer, a transmission axis of the first polarizing means is substantially in parallel to a transmission axis of the second polarizing means, a director of liquid crystal molecules is substantially orthogonal to a lagging axis of the first optical compensation means, when the highest voltage is applied, in the second area, a value of retardation Rr of the liquid crystal layer and a value of retardation R1 of the first optical compensation means satisfy $100nm \leq (Rr-R1) \leq 170nm$, the director of the liquid crystal molecules is substantially orthogonal to a lagging axis of the second optical compensation means, and when the highest voltage is applied, in the first area, a value of retardation Rt of the liquid crystal layer, the value of retardation R1 of the first optical compensation means, and a value of retardation R2 of the second optical compensation means satisfy $-50nm \leq (Rt-R1-R2) \leq 50nm$.

43. The display as defined in claim 21, wherein, in the first direction of the display medium, light-scattering means having a light-scattering function is provided.

44. The display as defined in claim 43, wherein, an overall haze of the display is not less than 50 and not more than 95.

45. The display as defined in either claim 25 or 26, wherein, a transmission axis of the first polarizing means is substantially in conformity to a horizontal direction with respect to a posture of the display in use.

46. The display as defined in any one of claims 1, 2, 3, 4, 15, and 21, further comprising light modulation means for switching a traveling state of predetermined incoming or outgoing light in a predetermined manner, the light modulation means being provided at least either on the side in the first direction or on the side in the second direction of the display.

47. The display as defined in claim 46, wherein, the light modulation means switches a traveling direction of the outgoing light exiting from the display, between a transmission direction with respect to the light modulation means and a scattering direction with respect to the light modulating means.

48. The display as defined in claim 47, further

comprising light irradiation means for irradiating light for image reproduction by the display, as the incoming light,

wherein, the light modulating means is disposed between the light irradiation means and the display medium, and when the traveling direction is set to be the scattering direction, the light modulating means causes light irradiated from the light irradiation means to be in the scattering direction with respect to the light modulation means.

49. The display as defined in claim 46, wherein, the light modulation means switches a traveling direction of the outgoing light exiting the display, between a transmission direction with respect to the light modulation means and a scattering direction with respect to the light modulating means.

50. The display as defined in claim 46, wherein, the light modulation means switches the traveling direction between a direction that both of two types of polarized light orthogonal to each other are transmissive with respect to the light modulating means and a direction that one type of the polarized light is reflected on the light modulation means while the other type of the polarized light is transmissive with respect to the light modulation means.

51. The display as defined in claim 46, wherein, the light modulation means switches the traveling direction of the outgoing light exiting the display, between a direction that a light path which does not change the traveling direction is set in the light modulating means and a direction that a light path which changes the traveling direction is set in the light modulating means.

52. The display as defined in claim 46, wherein, the light modulating means switches the traveling direction of the outgoing light exiting the display, between a transmissive direction with which the light passes through the light modulation means and an absorbing direction with which the light is absorbed by the light modulation means.

53. The display as defined in claim 46, further comprising light irradiation means for irradiating light for image reproduction by the display, the light modulating means also functioning as a protective cover of the light irradiation means.

54. The display as defined in any one of claims 46-53, wherein, the light modulation means switches the traveling direction, in accordance with a switching between image reproduction on the side in the first direction of the display

and image reproduction on the side in the second direction of the display.

55. A device comprising the display as defined in any one of claims 1, 2, 3, 4, 15, 21, and 46, the display being foldable in such a manner that an image reproduction surface on the side in the first direction of the display comes on an outside of the display, while an image reproduction surface on the side in the second direction of the display comes on an inside of the display.

56. The device as defined in claim 55, wherein, a member facing the image reproduction surface on the side in the second direction of the display when the device is folded is a light-absorbing member.

57. The device as defined in either claim 55 or 56, further comprising an operating button for instructing reversal of tones of an image displayed on the side in the first direction of the display and reversal of tones of an image displayed on the side in the second direction.

58. The device as defined in claim 57, wherein, the operating button is an automatic operating button which is automatically operated and instructs the reversal, in

accordance with opening and closing motions of the device.

59. A device comprising:

the display defined in any one of claims 1, 2, 3, 4, 15, 21, and 46, and

a light-absorbing member which can be disposed so as to face an image reproduction surface on the side in the second direction of the display.